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From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>
Errors-To: Info-Hams-Errors@UCSD.Edu
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To: Info-Hams

Info-Hams Digest Fri, 8 Oct 93 Volume 93 : Issue 1195

Today's Topics:

 HTs Airlines and Morris
 Radio Shack SWR Meters
 Renewal rechargeable alkalines?
 Weekly Solar Terrestrial Forecast & Review for 08 October

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(by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: 7 Oct 1993 07:57:00 -0400
From: agate!howland.reston.ans.net!noc.near.net!genrad.com!genrad.com!not-for-mail@ames.arpa
Subject: HTs Airlines and Morris
To: info-hams@ucsd.edu

In article <749920487snx@skyld.tele.com> jangus@skyld.tele.com (Jeffrey D. Angus) writes:

>At the beginning of the flight, the Captain came on the intercom and announced
>that using certain types of electronic gear was prohibited on the airline and
>that said prohibition was due to FAA regulations.

>

>Note: During the flight, the HT stayed inside the carry-on bag where it was
>packed. I occupied myself reading the escape map, catalogs and barf bag notes.

>

>At the end of the flight, I stopped at the front and asked the Captain which
>FAA regulations were those that covered the prohibited electronic gear.

>

>The Captain appologized for not knowing the exact regulation number but said

>that the announcement was company policy. And that if I wrote to the airline,
>they could probably provide me with the regulation reference.

Right after we purchased a portable GPS, we flew to Arizona. When we boarded the plane we asked the pilot if we could use it. He thought so, but wasn't sure, so he opened up his airline regulations book, and we read directly out of the book that almost ALL electronic gear was prohibited during the first 10 minutes and the last 10 minutes of the flight (ie, takeoff and landing). There was some specific equipment which couldn't be used at any time in flight. Since the GPS was not one of the "specific equipment" listed, he said, "go ahead and use it, after the 10-minute announcement". Other equipment that could be used during flight (but not at beginning or end) included lap-top computers and cassette or cd players.

Now, as to the regulations from the FAR, here is the 1991 version (sorry, I don't have a recent FAR at work, I keep the recent one at home):

91.21 Portable electronic devices.

(a) Except as provided in paragraph (b) of this section, no person may operate, nor may any operator or pilot in command of an aircraft allow the operation of, any portable electronic device on any of the following US registered civil aircraft:

(1) Aircraft operated by a holder of an air carrier operating certificate or an operating certificate; or

(2) Any other aircraft while it is operated under IFR.

(b) Paragraph (a) of this section does not apply to --

(1) Portable voice recorders;

(2) Hearing aids;

(3) Heart pacemakers;

(4) Electric shavers; or

(5) Any other portable electronic device that the operator of the aircraft has determined will not cause interference with the navigation or communications system of the aircraft on which it is to be used.

(c) In the case of an aircraft operated by a holder of an air carrier operating certificate or an operating certificate, the determination required by paragraph (b)(5) of this section shall be made by that operator of the aircraft on which the particular device is to be used. In the case of other aircraft, the determination may be made by the pilot in command or other operator of the aircraft.

Translation: The FARs prohibit the devices on air carriers and on IFR flights. The air line carrier (NOT THE PILOT) is authorized to set its own regulations on which electronic devices CAN be used. On private flights, except under IFR flights, the PIC makes his own determination on which to allow.

I don't believe this particular FAR has changed in the past two years.

Diana

--

->Diana L. (Syriac) Carlson dls@genrad.com Ham: KC1SP (Sweet Pea) <-
->I'D RATHER BE FLYING! P-ASEL, INST CAP: CPT, Freedom 690 Mobile<-
->AD ASTRA, PER ASPERA Airplane: None :-(
<-
->GenRad, MS/6, 300 Baker Ave, Concord, Mass. 01742 (508)369-4400 x2459 <-

Date: 8 Oct 93 19:52:09 GMT
From: news-mail-gateway@ucsd.edu
Subject: Radio Shack SWR Meters
To: info-hams@ucsd.edu

>...just how good are the Radio Shack SWR meters (21-523 and 21-524).
>Douglas J Renze, N0YVW

Douglas, I've got one that I use for mobile work. I've compared it to the cross-needle SWR meter built into my MFJ antenna tuner and it's close enough for government work.

73, kg7bk@indirect.com

Date: Thu, 7 Oct 1993 07:00:59 GMT
From: netcon!bongo!julian@locus.ucla.edu
Subject: Renewal rechargeable alkalines?
To: info-hams@ucsd.edu

In article <1993Oct7.023102.20602@news.uiowa.edu> drenze@icaen.uiowa.edu (Douglas J Renze) writes:

>How do these new "Renewal" rechargeable alkalines stack up both against
>regular alkalines and NiCds? I'm thinking mostly along the lines of
>using these batts for HT's. Anybody tried 'em yet?

I saw the Rayovac rechargeables in a Walmart store in Wisconsin. Rayovac is a Wisconsin company. I have not seen any of these in California.

They had an 800 number on the package. So I gave them a call and spoke to one of their engineers on their dime.

I threw away my notes and his name and number as part of my paperwork reduction programme. But they are sending me data in the

mail.

Here is what I recall. Terrific self discharge numbers. this means the batteries can be left around charged for years and will work when plugged into something. With NiCads they can lose half their charge in a month or less. Metal Hydroxide batteries are worse. The Amp-hour ratings seemed OK, but the internal resistance is higher - this means you cant pull the current out of them that you can pull out of a NiCad. This could be promoted as a safety feature. A AA will feed about 300 Ma, A D cell (U2 UK) will pull about an Amp.

They can be recharged about 25 times. They need a fancy charging circuit - Rayovac sells a charger, but hams and manufacturers will no doubt wish to build their own.

Seemed to me that they would be ideal for emergency equipt - because of the low discharge rate and ability to recharge. So for radio recievers, flashlights, toys etc they would be ideal. They will suck in high powered walki-talkies, but will be fine for low power use especially as they can be charged a year before they are needed.

Sorry I lost my price paperwork so can't provide a cost comparison with regular Alkalines. I was told that a rechargeable alkaline has the same shelf and discharge characteristics as a regular alkaline - so yes, they will work in your energizer bunny.

--

Julian Macassey, N6ARE julian@bongo.tele.com Voice: (213) 653-4495
Paper Mail: 742 1/2 North Hayworth Avenue, Hollywood, California 90046-7142

Date: 8 Oct 93 15:35:09 GMT
From: news-mail-gateway@ucsd.edu
Subject: Weekly Solar Terrestrial Forecast & Review for 08 October
To: info-hams@ucsd.edu

--- SOLAR TERRESTRIAL FORECAST AND REVIEW ---
October 08 to October 17, 1993

Report Released by Solar Terrestrial Dispatch
P.O. Box 357, Stirling, Alberta, Canada
T0K 2E0
Accessible BBS System: (403) 756-3008

SOLAR AND GEOPHYSICAL ACTIVITY FORECASTS AT A GLANCE

10-DAY SOLAR/RADIO/MAGNETIC/AURORAL ACTIVITY OUTLOOK

	10.7 cm	HF Propagation +/- CON							SID				AU.BKSR DX				Mag	Aurora			
	SolrFlx	LO	MI	HI	PO	SWF	%MUF	%	ENH	LO	MI	HI	LO	MI	HI	%	K	Ap	LO	MI	HI
--	-----	-----							-----				-----				----	-----			
08	115	G	G	F	F	40	-05	75	35	NA	NA	NA	01	05	15	35	3	14	NV	NV	LO
09	112	G	G	P	F	40	-10	70	35	NA	NA	NA	03	20	30	35	5	20	NV	LO	MO
10	110	G	P	EP	EP	40	-40	65	35	NA	NA	NA	20	50	60	20	7	50	LO	MO	HI
11	110	G	F	VP	VP	40	-40	70	35	NA	NA	NA	15	40	50	25	6	40	LO	MO	HI
12	110	G	F	P	P	40	-30	70	35	NA	NA	NA	05	30	35	30	5	30	NV	LO	MO
13	110	G	G	F	F	40	-15	65	35	NA	NA	NA	04	15	20	30	4	20	NV	NV	LO
14	103	G	G	F	F	30	-10	65	30	NA	NA	NA	02	10	15	35	3	15	NV	NV	LO
15	103	G	G	F	F	20	-10	65	20	NA	NA	NA	02	10	15	35	2	12	NV	NV	LO
16	103	G	G	F	P	20	-05	65	20	NA	NA	NA	02	10	15	35	2	10	NV	NV	LO
17	103	G	G	F	F	20	-05	65	20	NA	NA	NA	02	10	15	35	2	10	NV	NV	LO

DEFINITIONS:

Date (day only)

10.7 cm SOLar radio FLuX forecast

HF Propagation Conditions for LOw, MIddle, HIgh, and POlar areas (see below)

HF Short Wave Fade Probability (in %)

HF Maximum Usable Frequency in +/- percent above seasonal normals.

HF Prediction CONFidence Level (in %)

VHF Sudden Ionospheric ENHancement Probs (in %), weighted for low-mid lats

PROBability of "s"poradic E (Es) during the UT day for low, mid and high lats

VHF AUroral BackScatteR Probs (in %) for LOw, MIddle and HIgh Latitudes

VHF Overall Global DX Potential (in %) - weighted for Low and Middle latitudes

Geomagnetic Activity Kp Index (peak value - see below)

GeoMAGnetic Activity Ap Index (peak value - see below)

AURORAl Activity for LOw, MIddle and HIgh Latitudes (see below)

HF Prop. Quality rated as: EG=Extremely Good, VG=Very Good, G=Good, F=Fair, P=Poor, VP=Very Poor, EP=Extremely Poor.

Probability of Sporadic E (Es) for the various latitudes is given in percent.

Kp Planetary Index rated: 0=V.Quiet, 1=Quiet, 2=Unstld, 3=Active, 4=V.Active, 5=Minor Storm, 6=Major Storm, 7=Maj-Sev Storm, 8=Severe Storm, 9=V.Severe.

Ap Planetary Index rated: 0-7=Quiet, 8-16=Unstld, 17-29=Active, 30-49=Minor Storm, 50-99=Major Storm, Severe Storm >=100.

Auroral Activity rated: NV=Not Visible, LO=Low, MO=Moderate, HI=High, VH=Very High.

PEAK PLANETARY 10-DAY GEOMAGNETIC ACTIVITY OUTLOOK (08 OCT - 17 OCT)

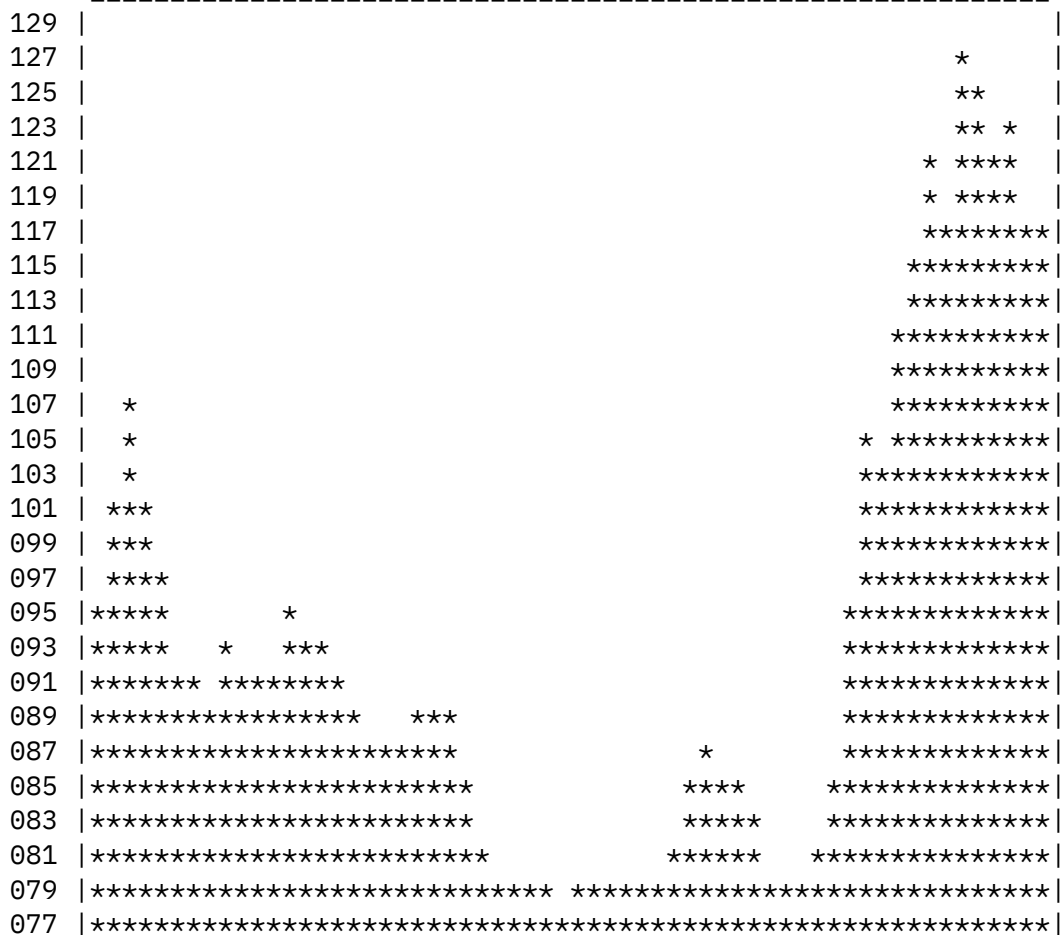
.....

NOTES:

This graph is determined by plotting the greater of either the planetary A-index or the Boulder A-index. Graph lines are labelled according to the severity of the activity which occurred on each day. The left-hand column represents the associated A-Index for that day.

Q = Quiet, U = Unsettled, A = Active, M = Minor Storm, J = Major Storm, and S = Severe Storm.

CUMULATIVE GRAPHICAL CHART OF THE 10.7 CM SOLAR RADIO FLUX



GRAPHICAL ANALYSIS OF 90-DAY AVERAGE SOLAR FLUX

```

-----
105 |
104 | *****      ***
103 | *****
102 | *****
101 | *****
100 | *****
099 | *****
098 | *****
097 | *****
096 | *****
095 | *****
094 | *****
093 | *****
092 | *****
-----

```

Chart Start: Day #221

NOTES:

The 10.7 cm solar radio flux is plotted from data reported by the Penticton Radio Observatory (formerly the ARO from Ottawa). High solar flux levels denote higher levels of activity and a greater number of sunspot groups on the Sun. The 90-day mean solar flux graph is charted from the 90-day mean of the 10.7 cm solar radio flux.

CUMULATIVE GRAPHICAL CHART OF SUNSPOT NUMBERS

```

-----
135 |
128 |
121 |
114 |
107 |
100 |
093 |
086 | * ***
079 | *****      **
072 | *****      **
065 | *****      * *** *
058 | *****      * *****
051 | *****      * *****
044 | *****      * *****
037 | *****      ** *****      *
-----

```


0%	***	***	***	***	***	***	***	***	***	***	***	0%	*	*	*	*	*	*	*	*	*	*
20%	***	***	***	***	***	***	***	***	***	***	***	20%	*	*	*	*	*	*	*	*	*	*
40%	***	***	***	***	***	***	***	***	***	***	***	40%	*	*	*	*	*	*	*	*	*	*
60%	***	**	*	*	*	***	***	***	***	***	***	60%										
80%												80%										
100%												100%										
=====	===	===	===	===	===	===	===	===	===	===	===		-----									
100%												100%										
80%												80%										
60%												60%										
40%	*	**	* *	* *	* *	* *	*	*	**	**	**	40%		*	*							
20%	***	***	***	***	***	***	***	***	***	***	***	20%		*	*	*	*					
0%	***	***	***	***	***	***	***	***	***	***	***	0%	*	*	*	*	*	*	*	*	*	*
-----	---	---	---	---	---	---	---	---	---	---	---		-	-	-	-	-	-	-	-	-	-
CHANCE OF	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun		F	S	S	M	T	W	T	F	S	S	
VHF DX	Given in 8 hour local time intervals											AURORAL BACKSCATTER										
-----	-----											-----										

LOW LATITUDES

FORECAST	Given in 8 hour local time intervals										SWF/SID ENHANCEMENT										
CONFIDENCE	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	F	S	S	M	T	W	T	F	S	S	
-----	---	---	---	---	---	---	---	---	---	---	-	-	-	-	-	-	-	-	-	-	
0%	***	***	***	***	***	***	***	***	***	***	0%	*	*	*	*	*	*	*	*	*	
20%	***	***	***	***	***	***	***	***	***	***	20%	*	*	*	*	*	*	*	*	*	
40%	***	***	***	***	***	***	***	***	***	***	40%	*	*	*	*	*	*	*	*	*	
60%	***	***	* *	* *	* *	***	***	***	***	***	60%										
80%											80%										
100%											100%										
=====	===	===	===	===	===	===	===	===	===	===		-----									
100%											100%										
80%											80%										
60%	*	*				*	*	*	*	*	60%										
40%	***	***	***	***	***	***	***	***	***	***	40%										
20%	***	***	***	***	***	***	***	***	***	***	20%			*	*						
0%	***	***	***	***	***	***	***	***	***	***	0%	*	*	*	*	*	*	*	*	*	
-----	---	---	---	---	---	---	---	---	---	---		-	-	-	-	-	-	-	-	-	
CHANCE OF	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	F	S	S	M	T	W	T	F	S	S	
VHF DX	Given in 8 hour local time intervals										AURORAL BACKSCATTER										
-----	-----										-----										

NOTES:

These VHF DX prediction charts are defined for the 30 MHz to 220 MHz bands. They are based primarily on phenomena which can affect VHF DX propagation globally. They should be used only as a guide to potential DX conditions on VHF bands. Latitudinal boundaries are the same as those for the HF predictions charts.

AURORAL ACTIVITY PREDICTIONS (08 OCT - 17 OCT)

High Latitude Locations

CONFIDENCE LEVEL ----- 65%	EXTREMELY HIGH											
	VERY HIGH											
	HIGH		***	**								
	MODERATE	*	***	***	***	*						
	LOW	***	***	***	***	***	***	***	***	***	***	***
	NOT VISIBLE	***	***	***	***	***	***	***	***	***	***	***

	AURORAL	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	
	INTENSITY	Eve.Twilight/Midnight/Morn.Twilight										

Middle Latitude Locations

CONFIDENCE LEVEL ----- 70%	EXTREMELY HIGH											
	VERY HIGH											
	HIGH											
	MODERATE		***	***	*							
	LOW	*	***	***	***	*						
	NOT VISIBLE	***	***	***	***	***	***	***	***	***	***	***
	-----	--	--	--	--	--	--	--	--	--	--	--
	AURORAL	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	
	INTENSITY	Eve.Twilight/Midnight/Morn.Twilight										

Low Latitude Locations

CONFIDENCE LEVEL ----- 70%	EXTREMELY HIGH											
	VERY HIGH											
	HIGH											
	MODERATE		*									
	LOW	*	***	***	*							
	NOT VISIBLE	***	***	***	***	***	***	***	***	***	***	***
-----		--	--	--	--	--	--	--	--	--	--	--
	AURORAL	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	
	INTENSITY	Eve.Twilight/Midnight/Morn.Twilight										

NOTE:

Version 2.00b of our Professional Dynamic Auroral Oval Simulation Software Package is now available. This professional software is particularly valuable to radio communicators, aurora photographers, educators, and astronomers. For more information regarding this software, contact: "Oler@Rho.Uleth.CA", or "COler@Solar.Stanford.Edu".

For more information regarding these charts, send a request for the document, "Understanding Solar Terrestrial Reports" to: "Oler@Rho.Uleth.Ca" or to: "COler@Solar.Stanford.Edu". This document, as well as others and related data/forecasts exist on the STD BBS at: (403) 756-3008.

** End of Report **

End of Info-Hams Digest V93 #1195
